

Claims

1. A gelly edible product containing a starchy vegetable material, characterised in that at least 50% of the vegetable material cells are broken and the amylose of the starchy vegetable material is dispersed into under 10 μm amylose particles within the amylopectin of the starchy vegetable material, the product having a water content of at least 60 % by weight, and the amount of starch derived from the vegetable material being from 2 to 70 % by weight of the dry substance of the product.
2. A product as defined in claim 1, characterised in that the amylose particles have a size in the range from 0.0005 to 5 μm , preferably from 0.005 to 1 μm .
3. A product as defined in claim 1 or 2, characterised in that the vegetable material comprises corn, vegetables, greens or mixtures of these.
4. A product as defined in any of the preceding claims, characterised in that the vegetable material comprises tuberous roots, preferably potatoes.
5. A product as defined in claim 4, characterised in that the vegetable material comprises the entire cell mass of tuberous roots, preferably peeled potatoes.
6. A product as defined in any of the preceding claims, characterised in having water content of at least 70 % by weight.
7. A product as defined in any of the preceding claims, characterised in comprising additionally one or more components selected from the following group: spices or other flavouring agents, colouring agents, structure-modifying agents, preservatives, nutrient and health-promoting components.
8. A product as defined in any of the preceding claims, characterised in having the form of a pudding, a puree or a soup.
9. A process for preparing a gelly edible product containing starchy vegetable material, the amount of starch derived from the vegetable material being from 2 to 70 % by weight of the dry substance of the product, characterised in comprising the following steps:
 - a) heating a vegetable material at a temperature of at least 100 °C under pressure in an aqueous medium, followed by

Best Available Copy

- b) rapid cooling of the heated product by a pressure drop of at least 100 kPa, whereby at least 50% of the vegetable material cells are broken and the amylose of the starchy vegetable material is dispersed into under 10 μm amylose particles within the amylopectin of the starchy vegetable material, yielding a product having a water content of at least 60 % by weight.
10. A process as defined in claim 9, characterised in that the pressure is decreased in the cooling step b) by at least 200 kPa, preferably at least 300 kPa, more preferably at least 500 kPa.
11. A process as defined in claim 9 or 10, characterised in that in the heating step a) the pressure is 200 to 1,500 kPa, preferably 300 to 1,000 kPa, more preferably 500 to 700 kPa.
12. A process as defined in any of claims 9 to 11, characterised in that in the heating step a), the temperature is in the range from 120 to 200 °C, preferably from 130 to 180 °C, more preferably from 140 to 160 °C.
13. A process as defined in any of claims 9 to 12, characterised in that the pressure is decreased in the cooling step b) to a pressure of 10 to 300 kPa, preferably 10 to 100 kPa, more preferably 10 to 80 kPa, most preferably 15 to 25 kPa.
14. A process as defined in any of claims 9 to 13, characterised in that the temperature is decreased in the cooling step b) to a temperature of 40 to 120 °C, preferably 40 to 100 °C, more preferably 40 to 80 °C, most preferably 60 to 65 °C.
15. A process as defined in any of claims 9 to 14, characterised in that the pressure is decreased in the cooling step b) by conducting the heated product to a space under vacuum.
16. A process as defined in any of claims 9 to 15, characterised in that the heating is rapidly performed in the heating step a), preferably by means of hot water steam.
17. A process as defined in any of claims 9 to 16, characterised in that the heating step a) has a duration of 1 to 60 s, preferably 2 to 10 s.
18. A process as defined in any of claims 9 to 17, characterised in that the vegetable material is matured before the heating step a).

19. A process as defined in any of claims 9 to 18, characterised in that water is added to the vegetable material before the heating step a).
20. A process as defined in any of claims 9 to 19, characterised in that flavouring and/or colouring agents are added to the vegetable material before the heating step a).
21. A process as defined in any of claims 9 to 20, characterised in that after the cooling step b), additional additives are optionally added to the product, and if necessary, the product is further cooled in order to form a gelly product.
22. A process as defined in any of claims 9 to 21, characterised in that the edible product is packaged before gelification to form a product that can be spooned up.
23. An edible product, characterised in being prepared with the process defined in any of claims 9 to 22.

Best Available Copy